

Date: Tuesday, 05/02/2008 8:54:47 AM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : FLOAT SKID LH 206L1,L3,L4&407
 Job Number : 36985
 Estimate Number : 10307
 P.O. Number :
 This Issue : 05/02/2008 S.O. No. :
 Prsht Rev. : NC Drawing Number : N/A
 Project Number : N/A
 First Issue : 25/01/2008 Type : LANDING GEAR Drawing Revision : L
 Material :
 Previous Run : 36984 Due Date : 10/03/2008 Qty: 1 Um: Each
 Written By :
 Checked & Approved By :
 Comment : Est Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM
 Est Rev:C 07-02-23 As per IIN D206-642 Rev K JLM
 est rev D 07.06.06 added K642-511 EC
 Est Rev:E 07-12-05 ECN 1080p Rev L DD verified by:

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



05.09.23

Comment: DOCUMENT CONTROL
 Photocopy bluefile and create labels per PPP D206-642-511CHG003

08/02/13

2.0 36985A FLOAT SKIDTUBE ASSEMBLY



36985A



50

Comment: Sub-Component FLOAT SKIDTUBE ASSEMBLY

1x

3.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
 Pick Packing Kit

4.0 K642 511 saddle kit 642-511



B36021



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
 saddle kit 642-511

50

1x

5.0 QC4 INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

08/02/13

6.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
 Identify and pack for shipping as per PPP D206-642-511
 Location:

8/2/13

50

1x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 1/25/2008 11:13:11 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : FLOAT SKIDTUBE ASSEMBLY
Job Number : 36985A	
Estimate Number : 10309	
P.O. Number :	Part Number : D206642541
This Issue : 1/25/2008 S.O. No. :	Drawing Number : D3274 REV D
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : LANDING GEAR	Drawing Revision : D
Previous Run : 36984A	Material :
Written By : <u>4A 08 01 25</u>	Due Date : 3/10/2008 Qty: 1 Um: Each
Checked & Approved By : <u>4A 08 01 25</u>	
Comment : Est Rev:B 05-09-23 Revised per D206-642 Rev. J KJ/JLM	
Est Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM	
Est Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D206-642-541 CHG003

2.0	D26001190	Extrusion Round 3" 206
-----	-----------	------------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch :

1 D2600-1-190 3" OD Tube

B31032 DM

8-1-28

3.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
-----	----------------	-------------------------



Comment: LANDING GEAR RESOURCE 1

1-Cut D2600-1 to 190.00" in length as per Dwg D3274 and Deburr ends

2-Drill #40 Aft cap pilot hole using DT8025

3-Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274

4-Remove inner indexing ridge on aft end of skidtube as per Dwg D3274

5-Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

8-1-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 1/25/2008 11:13:11 AM
User: Kimi Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 36985A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

4.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid Etch and Alodine tube as per QSI 005 4.1

SL 8-1-28

5.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Q-m 08-01-28 (1)

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

05/01/28 (1)

7.0

D3282041

I-Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3282-041 Float Web

36211 SL 8-1-29

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open Ø0.313" crossbolt spacer holes using DT8743 as per Dwg D3274

2-Open Ø0.375" crossbolt spacer holes using DT8744 as per Dwg D3274

3-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube

4-Bond web in place as per Dwg D3274 & QSI 015.

AVR Sikaflex-291

105469

Sikaflex expire date:

06-30-1

Start: 8-1-28

Time: 3:57

Finish: 08/01/28

Time: 8:30 AM

(Adhere for 12 hours)

SL 8-1-28

8-1-28

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/01/28 x1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Date: Friday, 1/25/2008 11:13:12 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 36985A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Bend tube using program D3274 as per Dwg D3274. Install drop pins in cross bolt spacer holes to maintain web position.

2-Cut Fwd end of tube to length as per Dwg D3274

*****Verify dimensions before and after cutting*****

3-Remove inner indexing ridge on Fwd end of skidtube as per Dwg D3274

4- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2
OPEN HOLES TO .297"

5-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD END OF TUBE
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

6- Countersink crossbolt spacer holes as per Dwg D3274

11.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

12.0

D32851

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3285-1 Fwd Cap

B33902

BE 08/01/31

13.0

D2649

Crossbolt Spacer



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number Description Batch

12 D2649 Crossbolt spacer

B36013

BE 08/01/31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D206-642-541 PAR #: NA Fault Category: Red Landing Gear NCR: Yes No DQA: Yes Date: 08/01/14
 QA: N/C Closed: Yes Date: 08/02/14

NCR: <u>36985A</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/01/13	# 10.1	After Bendig it was found that the top nuts on the roller shafts were installers too loose causing the skip to move during travelling.	<u>[Signature]</u> 08/01/13	See Attached E-mail From David Shepherd (tube "A")	<u>[Signature]</u> 8-1-31	<u>[Signature]</u> 08/01/13	<u>[Signature]</u> 08/01/13	<u>[Signature]</u> 08/01/13
		From End APT to Bwd. RC interference on Bender change	<u>[Signature]</u> 08/01/13			<u>[Signature]</u> 08/01/13	<u>[Signature]</u> 08/01/13	<u>[Signature]</u> 08/01/13

NOTE: Date & initial all entries

Date: Friday, 1/25/2008 11:13:12 AM
User: Kirn Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 36985A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description:

14.0

D32751

Crossbolt Spacer



Comment: Qty.: 12.0000 Each(s)/Unit Total: 12.0000 Each(s)

Pick:

Qty Part Number Description Batch

12 D3275-1 Crossbolt spacer

B34619 BE 08/01/31

15.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld Fwd Cap as per Dwg D3274 and QSI 004. Use aluminum rod.

A/R Aluminum Rod

M 106330 / M 106390 BE 08/01/31

2-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod

A/R Aluminum Rod

M 106330 BE 08/01/31

3-Grind welds flush to Fwd cap on top surface only.

4-Grind cross bolt welds flush as per Dwg D3274. Masking Tape access to inside of the skidtube

5-Counterbore 5/16" x 0.750" deep as per Dwg D3274. Use DT8743 visual aid Jig and deburr.

SL 8.2-1

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

ID 08-02-04 (1)

17.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

08/02/04 (1)

18.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

M 106379 08/02/05

(IX)

19.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M 106379 08/02/06

(IX)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 1/25/2008 11:13:12 AM
User: Kirh Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 36985A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



HL



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-02-06

(X1)

21.0

D3415041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3415-041 Nut Plate B33842

HL

22.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CCR264SS3-3 Rivet M1103525

HL

23.0

CR3212403

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CR3212-4-03 Rivet M15918

HL

24.0

ALS71032130

Insert



ALS41032130 min 2008h/13



Comment: Qty.: 78.0000 Each(s)/Unit Total : 78.0000 Each(s)

Insert

Batch: M105729

*

HL

25.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.

A/RN/ALPS-3 M106096

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a

HL

08-02-06

(X0)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 1/25/2008 11:13:12 AM
User: Kirn Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 36985A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

A/R Sikaflex-291

M1105585

Sikaflex expire date:

08-01

JS

26.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect Nut Plate & Inserts

08/02/06 JS

27.0

AN3C4A

BOLT



Comment: Qty.: 80.0000 Each(s)/Unit Total : 80.0000 Each(s)

BOLT

Batch:

M1106574

JS

28.0

D353515

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch:

B360653

JS

29.0

D353523

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch:

B35218

JS

30.0

D353535

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch:

B36194

JS

31.0

D353539

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch:

B35257

JS

32.0

D353615

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

B33964

JS

08-02-06

(41)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Date: Friday, 1/25/2008 11:13:12 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 36985A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

33.0

D353623

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

1333965

911

34.0

D353635

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

1336609

911

35.0

D353639

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

1333966

911

36.0

D35371

WEARPAD



Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)

WEARPAD

Batch:

326 Batches 5x => 1336363
4x => 1336714

911

37.0

D35373

WEARPAD



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARPAD

Batch:

1333285

911

38.0

AN960C10L

washer



Comment: Qty.: 80.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick:

Qty Part Number

Description Batch

80 AN960C10L

Washer

11107008

911

39.0

D36721

PHENOLIC WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Washer

batch

1334470

911

08-02-06

(X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

Date: Friday, 1/25/2008 11:13:12 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 36985A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

40.0

D34131

Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3413-1 Ring B33949

910

41.0

AN4C5A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN4C5A Bolt M118918

911

42.0

AN960C416

washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN960C416 Washer M1100993

912

43.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2646 Aft Cap 1336184

911

44.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

2-Install wearpads & gaskets as per Dwg D3274.

3-Install ring as per Dwg D3274

A/R Sikaflex-291 M105585

Sikaflex expire date: 08-07

4-Inspect for foreign objects as per QSI 024

5-Spray inside of tube on both sides of web with LPS-3

A/R LPS-3 Batch: M106096

6-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

912

08-02-06

(X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 08/02/14

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKIDTUBE ASSEMBLY

Job Number: 36985A

Part Number: D206642541

Job Number:



Seq. #:

Machine Or Operation:

Description :

A/R Sikaflex-291

M105585

Sikaflex expire date:

08-07

→ 41 08-02-06 (21)

45.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

6 05/12/06 (21)

46.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and stock

Location:

PP 36985 28/2/13 (1)

47.0

QC21

FINAL INSPECTION W/O RELEASE



Comment: FINAL INSPECTION W/O RELEASE

(1)
28/02/14

Job Completion



2008/1/13 (1)
W

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3274	REV. D SHEET 1 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY	SCALE NTS
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

RELEASED07.02.12 **[Signature]**

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

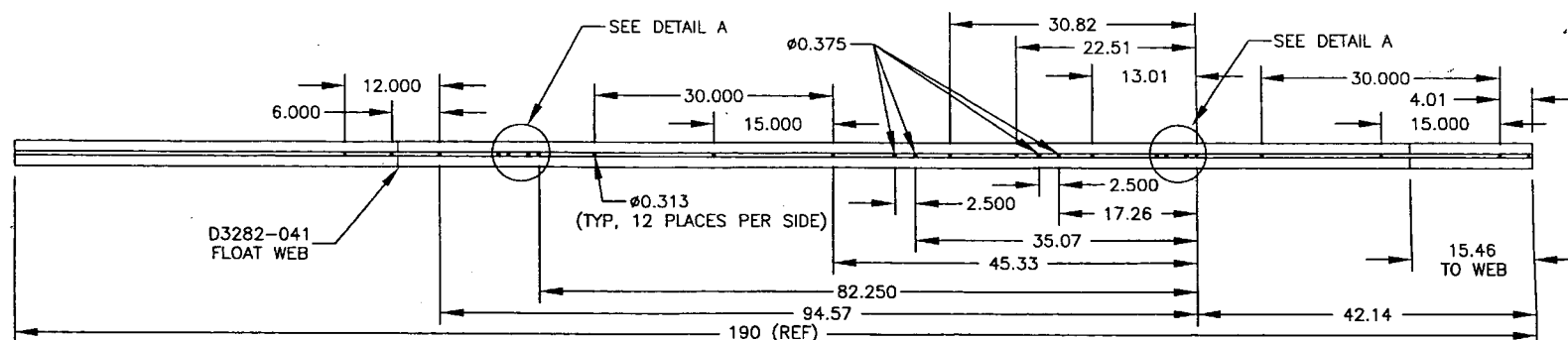
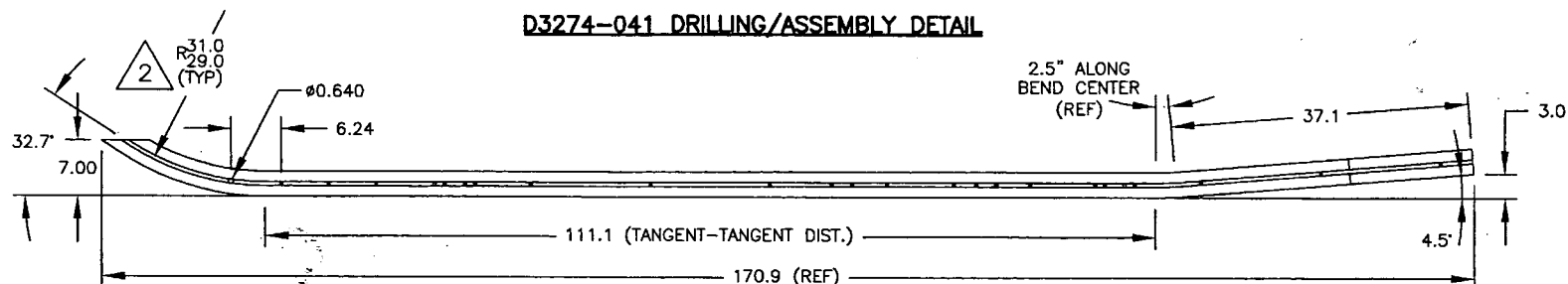
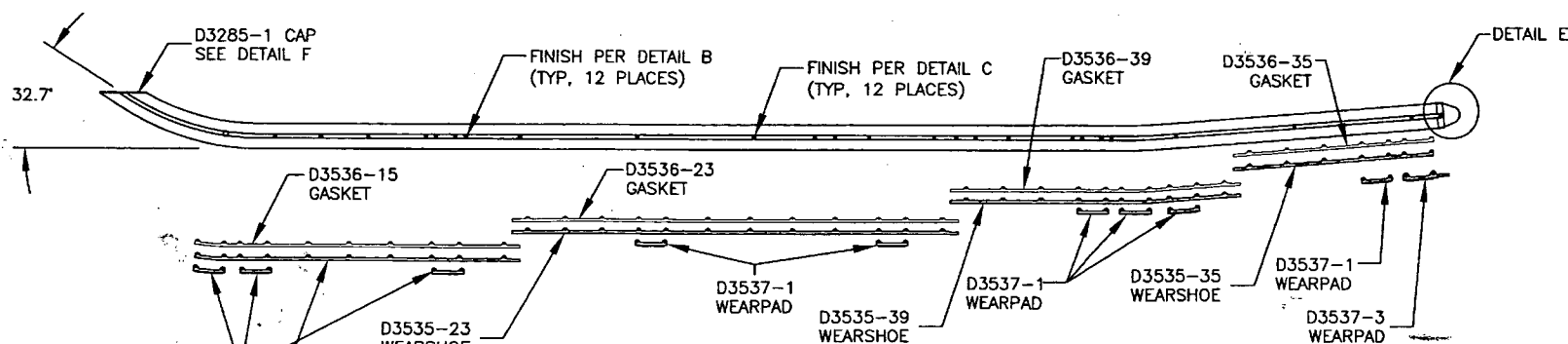
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170.4-

171.4

**D3274-041 DRILLING/ASSEMBLY DETAIL****D3274-041 BEND/DRILLING DETAIL****D3274-041 SKIDTUBE ASSEMBLY**
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

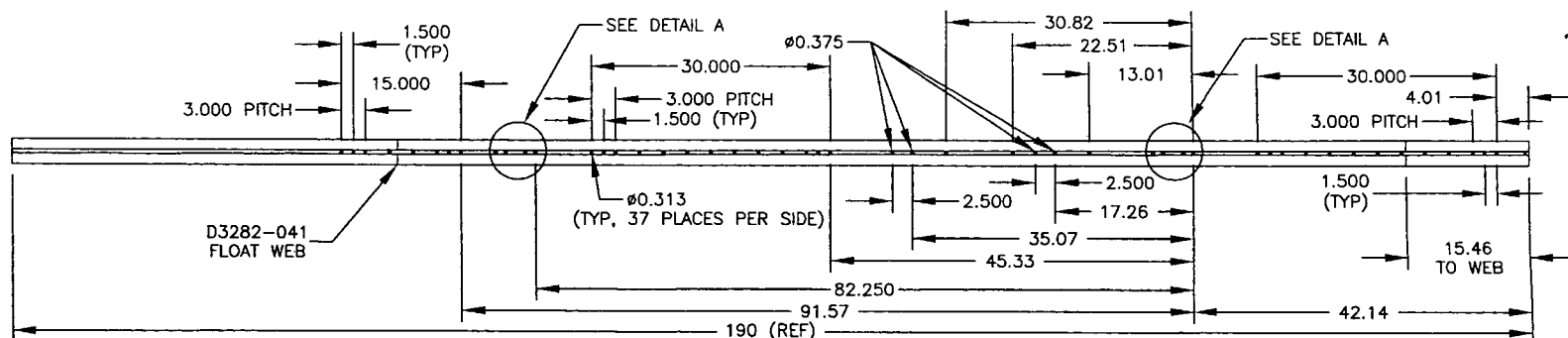
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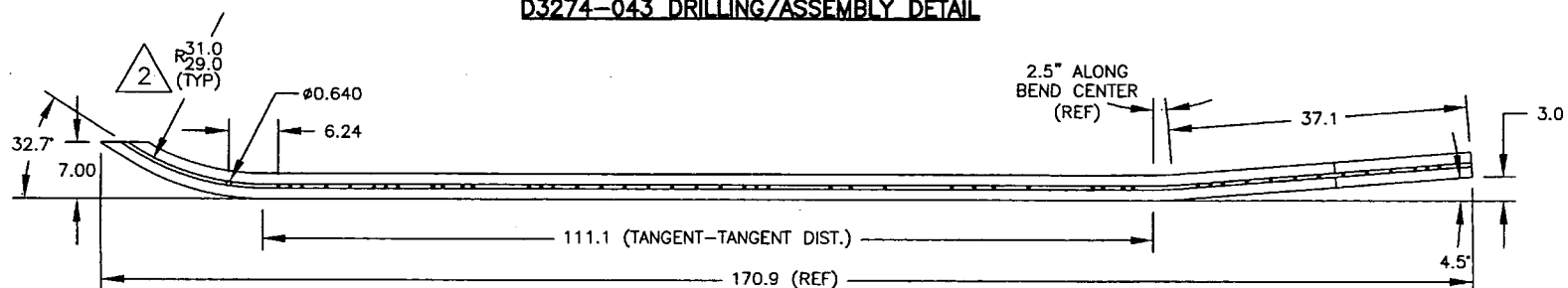
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DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	D3274	SHEET 2 OF 4
				SCALE	1:15

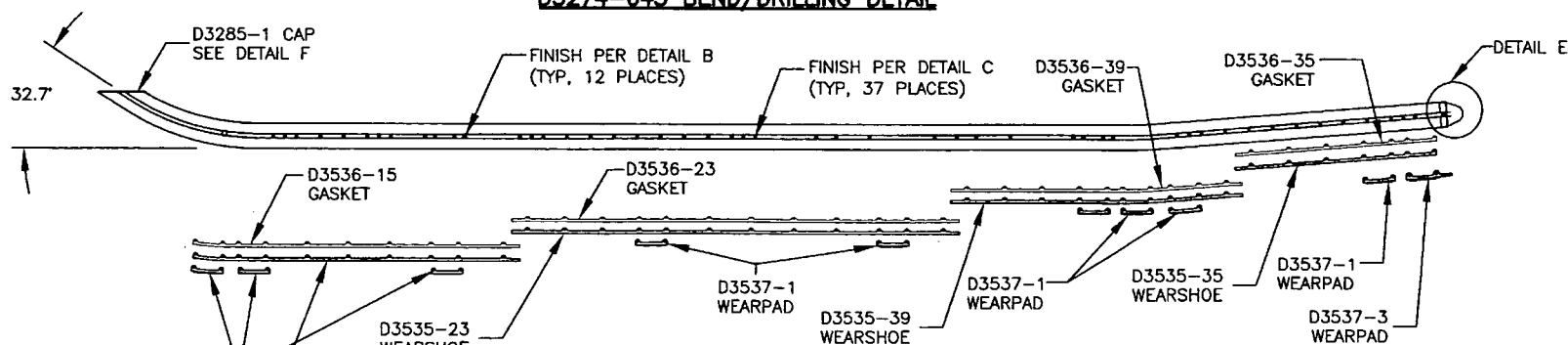
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D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

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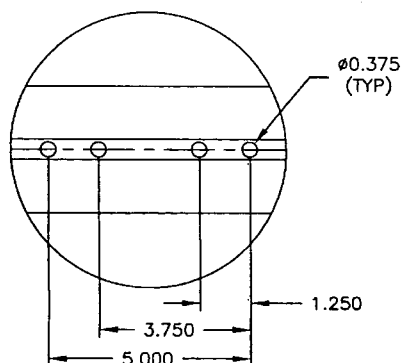
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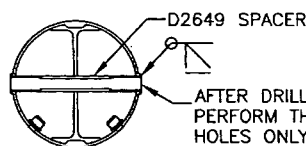
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DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	SCALE	1:15

DETAIL A: DRILL DETAIL

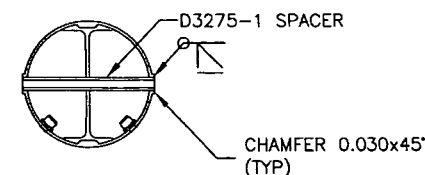


DETAIL B FOR 0.375 HOLES ONLY

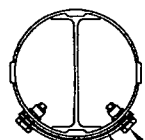


- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR 0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE TO 0.313x0.75 DEEP

DETAIL C FOR 0.313 HOLES ONLY



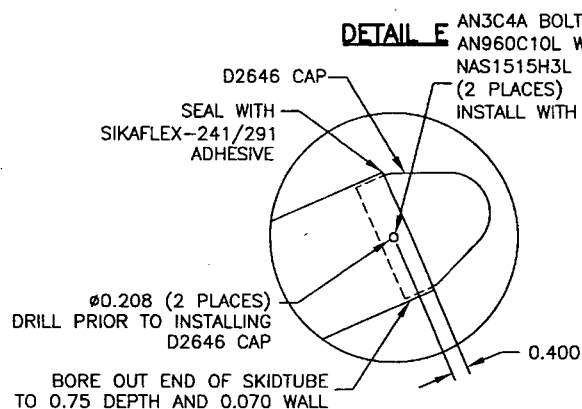
DETAIL D



- ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
AN960C10L WASHER (1)
(78 PLACES)

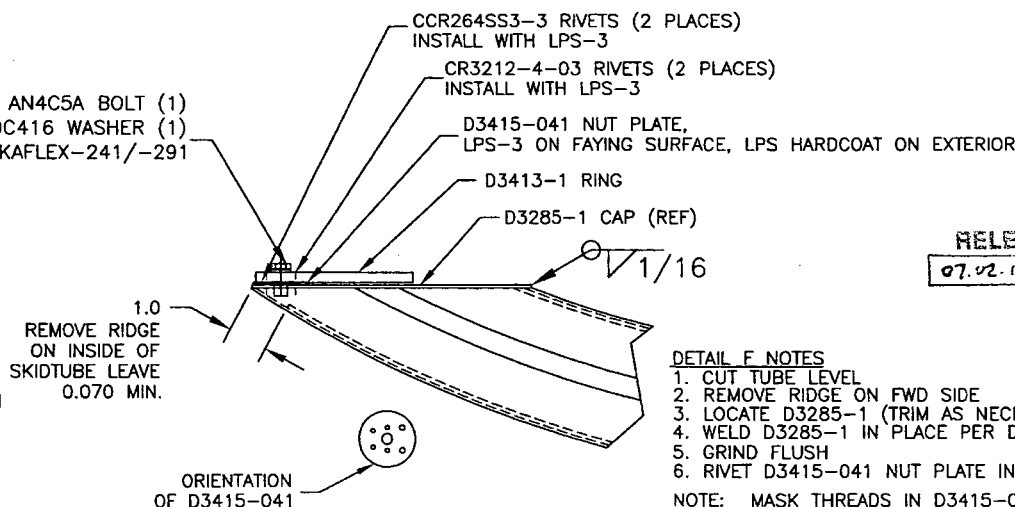
GASKET/WEARSHOE/WEARPAD (REF)

DETAIL E



- AN3C4A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(2 PLACES)
INSTALL WITH SIKAFLEX-241/-291

DETAIL F: END FINISHING DETAIL



DETAIL F NOTES

1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D3285-1 (TRIM AS NECESSARY)
 4. WELD D3285-1 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

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		DATE	06.12.19	DRAWING NO. D3274		TITLE SKIDTUBE ASSEMBLY	
						SCALE 1:3	

Jason Murdoch

From: David Shepherd [dshepherd@dartaero.com]
Sent: January 30, 2008 2:59 PM
To: 'Jason Murdoch'
Cc: bbeckett@dartaero.com; 'Cris Provencal'; 'mpetsche@dartaero.com'; 'L Lacelle'; 'Susanne Sheldon'
Subject: RE: D206-642-541 Skid tubes

Eric,

Thanks for putting this email together.

As we discussed on the phone, we have too much money into these tubes to scrap them at this point without a really good reason.

While these do not conform to the drawing, I believe them to be structurally acceptable for installation on the aircraft.

Therefore, I reluctantly accept these deviated skidtubes.

I think this deserves a pink NCR and some re-training.

I can understand making one like this, but 3???

These are big money bends and the guys who are doing it HAVE to realize that and somehow double check their setup before pushing the pedal.

David

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: Wednesday, January 30, 2008 12:05 PM
To: David Shepherd; David Shepherd; 'mpetsche@dartaero.com'
Cc: bbeckett@dartaero.com; Cris Provencal
Subject: D206-642-541 Skid tubes

Hello David its Eric Downing

As discussed earlier on the phone here is the brief description of what happened to the three D206-642-541 Skid tubes.

The bender was not set up correctly. The top holding nuts were not set at the correct tightness causing the DX roller (left size if you were looking at the control) and caused the tube to slip/moved as it was traveling from bending the aft to the fwd section.

Here are the dimensions for the affected tubes:

Tube "A" B36935 Total Length 171.250"
 Tangent to Tangent 114.1"
 Aft Height 3.0"

Tube "B" B36986 Total Height 170.563"
 Tangent to Tangent 114.1"
 Aft Height 3.25"

Tube "C" B 36984 Total Height 170.375"
 Tangent to tangent 114.1"
 Aft Height 3.06"

30/01/2008

The Root Cause was due to some inexperience in the landing gear cell.

Thanks for your time David

Eric Downing

Jason Murdoch

Qc. Coordinator

jmurdoch@artaero.com

No virus found in this incoming message.

Checked by AVG Free Edition.

Version: 7.5.516 / Virus Database: 269.19.16/1251 - Release Date: 1/30/2008 9:29 AM

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30/01/2008

NO. 137

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay E
Joint Welding Procedure GTAW
Part number and Job number D206612341 / B36133

TEST WELDS REQUIRED

BASE METAL Aluminum WELDING PROCESS ts
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 08-01-07 Qualifier Pat. Dural